

**CLAIMS**

1. A method for slowing or arresting the progression and/or effecting regression of atherosclerotic plaque in a mammal, the method comprising the steps of
  - 5 a) administering to the mammal an effective amount of a binding agent having a binding site specific for integrin alpha10 chain or nucleic acid encoding said chain on the cell surface or intracellular of said mammal,
  - b) scoring the progression and/or regression of atherosclerotic plaque, and
  - 10 c) correlating the scoring in b) above to slowing or arresting the progression and/or effecting the regression of said atherosclerotic plaque.
2. The method according to claim 1, wherein the cell surface is the cell surface of a smooth muscle cells.
- 15 3. The method according to claim 1, wherein the binding agent has a binding site intracellular of a smooth muscle cells.
4. A method for treating atherosclerosis in mammals in the need thereof, the method comprising the step of administering to the mammal an effective amount
  - 20 of a binding agent having a binding site specific for integrin alpha10 chain on the cell surface or intracellular of said mammal.
5. A method for diagnosing a mammal who has or may be at risk of developing atherosclerosis, the method comprising the steps of
  - 25 a) determining the amount of integrin alpha10 chain in a mammal.
  - b) scoring the amount of integrin alpha10 chain in said mammal, relative to a control,
  - c) correlating the amount obtained in step b) above with amounts obtained from the control to determine whether the mammal has or is at risk of
  - 30 developing atherosclerosis.
6. The method according to claim 5, wherein the determining is performed in vivo.
7. The method according to claim 5, wherein the determining is performed in vitro.
- 35 8. The method according to any of claims 5-7, wherein determining of the amount of integrin alpha10 chain further comprises contacting the integrin alpha10 chain with a binding agent having a binding site specific for said of integrin alpha10 chain.

9. A method for detecting atherosclerotic plaque in a mammal, the method comprising the steps of
- a) determining the amount of integrin alpha10 chain in a mammal,
  - 5      b) scoring the amount of integrin alpha10 chain in said mammal, relative to to a control, and
  - c) correlating the amount obtained in step b) above with amounts obtained from the control to detect said atherosclerotic plaque in the mammal.
- 10    10. The method according to claim 9, wherein the determining is performed in vivo.
11. The method according to claim 9, wherein the determining is performed in vitro.
12. The method according to any of claims 9-11, wherein determining of the amount  
15      of integrin alpha10 chain further comprises contacting integrin alpha10 chain with a binding agent having a binding site specific for said of integrin alpha10 chain.
13. The methods according to any of claims 1-12, wherein the mammal is a human.
- 20    14. The methods according to any of claims 1-12, wherein the mammal is a mouse.
15. Use of integrin alpha10 chain for slowing or arresting the progression and/or effecting regression of atherosclerotic plaque.
- 25    16. Use of integrin alpha10 chain for the preparation of a composition for the treatment of atherosclerosis.
17. Use of integrin alpha10 chain for diagnosing atherosclerosis.
- 30    18. Use of integrin alpha10 chain for detecting atherosclerotic plaque.